

National Institute of Genetics  
Misima, Sizuoka-ken, Japan  
September 30, 1959

Dr. J. Lederberg  
Department of Genetics  
Stanford University  
Stanford, Cal.  
U. S. A.

Dear Josh,


Would you tell me your plan on the manuscript entitled "Monophasic variants in Salmonella", which you have agreed to write followed my thesis and the abstract. If your business still have to keep you off from the manuscript writing, I will undertake it and will ask your revision: originally it is my duty as I am to be the senior author of the paper. If you hesitate writing because you think my data are not complete enough to publish, please let me know frankly your opinion about it. ~~the~~ One reason I write you about the manuscript is that Dr. Beale asked me to tell him the progress of my researches on the genetics of flagellar antigen after 1956's paper for his review article on "Antigenic Variation in Unicellular Organisms" for ~~this~~ the Annual Review of Microbiology. Another reason is that I have a plan to start writing a paper on the morphological mutants of flagella, in which I have to refer the study on the monophasic strains.

I obtained a P22 sensitive clone from the i:b strain, SW1162 (the origin of which, as you may remember, is, SW803 b:enx  $\rightarrow$  SW1061  $\rightarrow$  (i):1.2  $\rightarrow$  (i):b, SW1161. TM2 i:1.2  $\rightarrow$  SW1161  $\rightarrow$  i:b, SW1162, see my Research Report (July 6, 1956)). The transduction i:b  $\rightarrow$  a:enx produced i:enx and a:b but not ~~ixf~~ a:1.2. enx-antigen type has not been detected from the a:b clones so far. Anti-b<sub>sw803</sub> serum and -b<sub>sw1161</sub> serum were prepared. The cross ~~agglutination~~ absorptions do not remain any agglutinable fraction. I am inclined to assume that the strain SW1162 has H<sub>1</sub><sup>i</sup> H<sub>2</sub><sup>b</sup> rather than it is heterogenote or H<sub>1</sub>-duplicant. The H<sub>2</sub><sup>b</sup> might have been produced by a kind of unequal recombination: H<sub>1</sub> and H<sub>2</sub> might be homologous in origin and have an affinity to pair in rare frequency in case the transductional fragment is small enough.

Last semester, I gave two credits of lectures on "Bacterial Genetics" at the Graduate School, Tokyo Metropolitan University. In the coming congress of the Genetics Society in Japan, <sup>which</sup> will be held at the beginning of November, I will be a chairman of the "Microbial genetics" section. Hirota wrote me in his letter that Esther asked him on my present marital status. I am still single. Please tell Esther that I am sure I will write her any progress in the status as well as in the E. coli x Salmonella study.

Best regards to Esther, Ann, and Hirota san.

Sincerely yours



P.S. I have not heard any news about the grant from NIH yet.